



WITH A

BRIEF VIEW

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HINDU MUSIC.

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PREFACE.

Indian Melodies, the Author has set to notation the six principal Rágas of the Hindus, adopting their national notation as the one indispensable for the thorough expression of Hindu Music. To impart picturesqueness to the treatise, as well as to clothe it with orientalism, he has also given their emblematical representations. As a preliminary matter, the Introduction treats of topics, a knowledge of which is necessary for the due comprehension of the Rágas.

In the Appendix, the Author has noted down a few songs of Jayadeva—a true 'poetic child'—to marry at the auspicious moment of the Prince's advent, Music to 'immortal Verse.'

Conscious as the Author is that the offering he brings to the throne, is not worthy of His Royal Highness, he hopes and believes that what may be wanting in the book, will be considered made up for by his devoted loyalty.

INTRODUCTION.

In the acceptation in which it is taken by us, the word sangita has a complex signification. It means the union of three things—gita, vádya and nritya; or song, percussion and dancing. The works that treat of the principles and laws of both vocal and instrumental music, and of the rules and directions with regard to the whole scope of theatric representation, are called Sangita Śástras. Sangita Śástra may be considered

tation, are called Sangita Sástras. Sangita Sástra may be considered in a two-fold view—as a science and as an art. Considered as a science, it treats of the origin and propagation of Náda or sound of the doctrine of srutis, or the theory of Sanskrita intervals, of the doctrine of svaras or musical sounds, of the formation of the different species of scales, of the rules of múrchchanás and túnas, of the composition of rágas and their various modifications and variations, of the variety of tálas or times conformable to regular metre, and of the rules and directions with respect to the various styles of theatric representation. Considered as an art, it lays down the necessary directions for the cultivation of the human voice, for the performance of instru-

Sangita Śástra is accordingly divided into two portions; namely, aupapattika and kriásidaha, or theoretical and practical. The general and most essential characteristic of gita vádya and nritya is rakti or the power of affecting the heart.

mental music, and for the various motions and gestures in dancing.

Of Sangita, there are two descriptions—Marga and Desi; the former being the style of music invented by the Rishis and the Gandharvas, and extant among the Aryyas; the latter comprising all the various styles of music that obtain in various places: The highest order of music, the Marga Sangita, being of sacred origin, is everywhere the same, and is universally venerated; but the Desi styles are of local growth, and are determined by the manners, habits and characters of the people among whom they prevail, each style having its peculiarities. Although the theory of the Marga Sangita has been still preserved in the Sanskrita works on music, yet owing partly to want of cultivation, partly to political influence, and partly to other adventitious circumstances, the practice of it has almost become extinct. Ragas and ragints, in these days, are performed without strict regard to the rules laid down by the Sanskrita authorities; while dancing is no more the representation of sacred love and affection which animated the heart of the ancient Hindus.

With regard to the origin of Sangita, we are quite in the dark. In the absence of historic light, all our attempts to penetrate the thick gloom of antiquity prove abortive. The accounts of ancient India are either buried in the abyss of time, or so enveloped in mythical legends that they appear to us too obscure to reason upon. The accounts of the Puranas or later religious books of the Hindus, are so wrapped up in mysteries and fables that we can hardly confide in their veracity. It was a very common custom with the ancients to ascribe to divine revelation the invention of all the arts and the sciences of which they possessed no records.

The information which we derive from the Puránas on the subject of music have no doubt some pretension at least to authenticity; and gleams of truth may be gained from them. Music in that venerable antiquity was cultivated by the Rishis and the Gandharvas, who brought it to a considerable degree of improvement. Among inspired mortals, the first musicians are said to have been Nárada, Tumburu, Huhu, and Bharata, of whom the last is believed to have reduced it to a proper system, and brought it down to earth from the land of the gods. It may be observed in passing that the allusion to gods probably refers to the Aryyas who breathed and thought long before the age of Homer, on the plateau of Central Asia, which is well known to be situated somewhere beyond the Hindukush. The light of revelations and the evidences of ethnology concur in pointing to this spot as the primæval abode of humanity. Philological researches and comparative anatomy tend to confirm the basis on which such a doctrine is made to stand. Placed under a mild climate, and under a strange coincidence of congenial circumstances, the human mind bloomed here in its full vigour and natural freshness. sprang that light which illuminates the real history of modern civilization. Here it was that societies were first established, and philosophy, agriculture, and noble arts first received any considerable development. in this region that music was cultivated by the holy sages, who are represented by the ancient authorities as gods, in contradistinction to the surrounding people, who were involved in ignorance and barbarism. Gandharva Veda, which is entirely devoted to music, is derived from the Sáma Veda, a relic of the Aryan mind—a fact which conclusively proves

that Hindu music received a systematic precision even in so high an antiquity as the Vedic age.

Sangita Vidyá or music is otherwise called Náda Vidyá on account of the whole system of music being evolved from náda or sound. Náda gives birth to srutis or enharmonic genus, which again are the essential elements in the formation of svaras or tones; these svaras, ranged and disposed in various successions, constitute the variety of rágas; and from rágas, gita or songs receive their proper character. It is by náda that vádya is developed; gita and vádya again are the necessary accompaniments of nritya. Nada therefore underlies the three constituents of Sangita.

Sanskrit authorities are of opinion that náda has its origin in dkása, the ethereal element which pervades the whole universo; and ascribe this phenomenon to the combined action of fire and air. It may here be observed that the phenomena that were formerly ascribed to fire, are in the present age considered as the effects of heat. Science being then but in its infancy, no wonder that cause and effect would be confounded. It is an experimental fact that fluids in general manifest an expansive motion, on being heated. When any portion of fluid in the atmosphere rapidly expands owing to the increase of temperature, it creates in the surrounding body of air a vibratory motion which is the immediate cause of the phenomenon. We cannot however form an idea of its efficient cause. It appears evident that there is in the ákása an aptitude to

produce náda, as well as a capacity in the ear it receive it; but as regards the nature of that aptitude, it is beyond human comprehension in the present system of our existence. This aptitude it is which is probably called by the Sañskrita writers anáhata or ákásasambhava náda. It is developed into áhata náda, by the collision of two objects. It is a matter of every-day experience that whenever two bodies mutually strike each other, an impression is produced on the ear by the vibrations of the air acting upon that organ, and thus we get the idea of náda.

According to the manner of its production, náda is classified into káyábhava, or those that are produced by the human organs of sound, into vínásambhava, or the sounds which arise from the vibrations of the strings of musical instruments, and into vañsadisambhava, or the sounds proceeding from breathing through the wind instruments.

We shall now exhibit the view of the Sanskrita writers on the origin and nature of the vocal sound. In their opinion, vital air or air in the lungs expands rapidly by the action of heat, and in its passage upwards through the mouth, receives a tremulous motion, which is the immediate cause of the káyábhava náda. This is a physical question which requires to be elucidated. When air in the lungs grows hot by being suddenly compressed, it gets an expansive motion, and forces its way through an apparatus placed above the windpipe, called larynx or glottis, which regulates the tension of certain vocal chords, and puts them into vibration sufficiently rapid to produce all the various tones of voice.

The human voice is distinguished according to its grámasthana, or the appropriate organs which appear most chiefly concerned in its modulation and tone, into mandra, madhya and tára. The mandra voice is supposed to proceed almost entirely from the umbilical region, and is designated by the English as the chest voice; the madhya voice appears to proceed immediately from the organism of the throat, and is called the throat voice; and the tára voice is said to have its origin in some of the cavities of the brain, and is produced by breathing through the nostrils which modulate it by their influence. The tones that are produced in each of these successive places, are severally twice as intense as the similar ones in the former. That these different modifications of sound result from the different adjustments of the vocal mechanism cannot be disputed. but it is difficult to ascertain the precise nature of these particular adjustments. It is necessary here to observe that, when we intend to utter a musical sound, we press together the vocal chords, and stretch them to a definite tension. It is this muscular action which extends the compass of voice, and gives it various degrees of intensity.

Náda begets śruti, śruti produces swara, from swara comes gráma, from gráma múrchchhaná, and múrchchhaná gives rise to tána. In the three foregoing grámasthanas, there are three species of tána; in each tána, there are śrutis, swaras, grámas and múrchchhanás by which grámas, are varied. Thus gíta, we find, pre-supposes śrutis, swaras, grámas múrchchhanás and tánas. We shall dwell on these topics as we proceed.

We find some of the European students of Hindu music slow in comprehending the doctrine of srutis. Although they recognise such minute intervals in theory, they insist on the impracticability of managing them to musical advantage. The reason for such misconception is that they are unaccustomed to such nicety of musical progression. A little acquaintance with the practice of our music will convince them not only of the practicability of the feat, but also of the facility with which it may be achieved. The practised musicians among us can bring it about in both vocal and instrumental performance. Srutis, when cleverly managed, never fail to have a most agreeable effect on the ear; though to appreciate them requires a delicacy not usually met with.

Sratis form the ground-work on which the superstructure of Hindu music is built. All attempts to comprehend its principles without an accurate conception of them, would prove abortive. We therefore intend to give a clear exposition of the nature of sratis and their application in Hindu music.

Scritis, in the musical acceptation of the term, are particles of sound, perceivable by the ear. They are the essential elements in the formation of the tones of which saptaka or octave is composed. They vary in quality or intensity according to the places of their origin; viz., the chest, the throat, and the head; those of the throat vibrating twice as rapidly, and, being consequently twice as intense, as these similar ones of the chest;

and what holds true of this, holds also true of the rest. In each of these places, there are twenty-two kinds of them. It may be observed here that the compass of the Hindu scale is limited to three saptakas. The srutis of the lowest saptaka, which appear to proceed almost entirely from the lungs, are said to belong to the mandra grama; those of the middle saptaka, whose appropriate organ appears to be the throat, to the madhya gráma; and the srutis of the highest saptaka are supposed to be derived from the brain, and are said to dwell in the túra gráma. To every one of these places, there are twenty-two strings said to be attached, from which, when struck by the wind, the *srutis* are said to proceed. These *srutis* vary the quality of the tones, and rise higher and higher up in succession, and gradually increase in intensity as they extend over different saptakas. In achaltháta, a species of stringed instrument whose frets are adjusted to the enharmonic scale, we perceive them to follow the same law of succession, but they are arranged and disposed in the reverse order. Thus we find that, unlike the chromatic scale of the English, which is divided into twelve semi-tones, our octave proceeds by still minuter intervals, called stutis, corresponding to the enharmonic genus of the Greeks. We shall now exhibit the disposition of srutis in the octave.

We divide the notes of a saptaka into twenty-two srutis, by assigning four to shaja, madhyamar and panchama, which, with the English, are reckoned major tones, three to rishava and dhaivata, which the English call minor tones, and two to gandhára and nishada, called by them semi-tones.

We deem it necessary to remark that the term quartertone is used in all English works in the sense of sruti; but it is not precisely a quartertone as is generally supposed. It is sometimes a quartertone, and at others the third of a tone, according to its position in the scale. The intervals between sharja and rishava, madhyama and panchama, panchama and dhaivata, as we have already stated, are each divided into four srutis; and each sruti in these definite places is a quartertone. Likewise there are three srutis between rishava and gindhira and dhaivata and nishada, and in these intervals, each sruti is the third of a tone. But it should be borne in mind that sruti cannot be reckoned quartertone or the third of a tone indiscriminately.

Each of the *srutis* has a distinct name assigned to it, as is specified in the following table:—

Notes.		NAMES OF THE COMPRISING SRUTIS.
Sharja Rishava		Tívrá, Kumudvatí, Mandá, Chhandovatí. Doyávatí, Ranjaní, Ratiká.
Gándhára Madhyama	•••	Raudri, Krodhí. Bajriká, Prasariní, Príti, Márjjanú.
Panchama Dhaivata	•••	Kshiti, Rakta, Sandípaní, Álapaní. Nandantí, Rohiní, Ramya.
Nishada -	•••	Ugrá, Kshobhini.

We apprehend that the progression by srutis is sufficient to show the relations which the intervals of the notes bear to each other; and that such progression is subservient to all musical purposes. It is capable of producing the simplest as well as the most complex order of music. From the calculation of srutis, as measuring the intervals, different kinds of scales are formed.

Against the foregoing doctrine of *srutis*, objections are generally urged that it is mathematically inaccurate. But it should be considered that in the arrangement of the intervals, the *Sañskrita* writers were not strictly guided by mathematical calculations, but that they proceeded on principles dictated by their sense of music.

For our own part, we cannot persuade ourselves to believe that mathematics is indispensably necessary for the comprehension of music, though we do not deny the susceptibility of its being subjected to a mathematical test. The principal thing we require in the acquisition of music, is a fine, well-cultivated ear, which enables us to detect and feel the sense of the various tonal combinations. Reducible as its principles are to scientific theories, the comprehension of those principles does not necessarily presuppose a knowledge of mathematics. Sense, we think, is the best judge in this matter.

From the writings of the Oriental scholars of Europe, little information can be derived on the Sanskrita doctrine of musical sounds, beyond a cursory notice of it. It shall be at present our endeavour to give in some detail the views of the Sanskrita writers, together with our own reflections on the subject.

A swara or musical sound is the aggregate result of a number of srutis. It has a calm and soothing influence on the ear, and in this particular it is that it differs from all other sounds. The swaras or notes are in number the same as in the music of the West, and are named and disposed in the following order:—

Sharja, rishava, gandhara, madyama, panchama, dhaivata, and nishada, of which the initial letters are taken in swarasadhana or solmization, and serve to exhibit the swaragrama or gamut, otherwise called saptaka. It stands as follows: sa, ri, ga, ma, pa, dha, ni, very nearly resembling the major mode of the English, ut, ri, mi, fa, sol, la, si, ut.

We learn from the Sañskrita writers that the various gradations of sounds constituting the swaragrama were originally derived from the cries of animals and the song of birds. The sharja, they say, was imitated from the call of the peacock; the rishava, from the bellowing of the ox; the gandhara, from the bleating of the goat; the madhyama, from the howling of the jackal, or from the voice of the crane; the panchama, from the call of the black bird, called kokhila; the dhaivata, from the sound of the frog, or from the neighing of the horse; and the nishada, from the noise of the elephant.

Men generally question the truth of this statement which, in their estimation, is a mere fable, originating in the minds of the Sanskrita writers. However paradoxical this may at first appear, we intend to

make some observations on this point, which may, to a great extent, unravel the mystery.

There is nothing in nature that calls forth our attention, or rouses our feeling so quickly as sound. In the primitive stage of society, when man led a rural life, nothing interested him so much as the cries of animals and the song of birds. Placed from their infancy within the reach of these sounds, they soon learnt to discern certain minute musical intervals, which are the germs of melody, and from which, in process of time, the suddha swaragrama or natural scale was evolved. We shall now cite a passage from an eminent authority to bear on our position. "The sounds of animated nature, especially the songs of birds, appear to be another source from which the formation of peculiar scales has been originally derived. The melodious notes of singing birds delight the savage as well as, and perhaps even more than the civilized man who cultivates music as an art. The former is familiar with them from his childhood. He unconsciously receives his musical instruction in the field and forest. The natural instinct for imitation, generally so powerful in the savage, soon leads him to produce intervals similar to those which he hears. He' finds his success in the chase facilitated by imitating the sounds of the animals which he desires to capture. His imitation must be so exact as to be deceptive. Thus his ear and his voice are practised and become accustomed to certain minute intervals, which are involuntarily transferred by him to his primitive songs, and from which, in the course of time, a fixed order of intervals is developed, and gradually extended to the

octave, constituting a scale." Among various transcripts of the voice of nature, which have been recorded in notation, we shall transcribe here only one or two instances, to show that music owes its origin to the simple and immutable expressions of animated nature, and that we derive many hints for musical composition from them.



It should be admitted that the intervals of the saptaka have not been hit upon by lucky chance; but that they have been discerned by extensive observation. From the calls of animated nature, the musical observers of antiquity ascertained the different gradations of sound that are practically employed in music, and found them all to fall under seven divisions, which are called the seven degrees of notes. Such is the law of nature that the gradation next above the seventh degree is similar to, though it is higher than, the first of the series of seven degrees. This principle of nature could not long have escaped the attention of the ancient Hindus, as these degrees of notes are said to occur in the Sama Vedu in their persent order. It is indeed astonishing how they could, in such a remote antiquity, acquire a truth which has been arrived at by the Europeans only at a recent period after long scientific investigation; and what is more so is, that our saptaka has received such a scientific precision that, if dhu is rendered but one sruti lower in the scale, it coincides with the diatonic scale of the Europeans. From the above circumstances, it must

be inferred that the intervals of the saptaka have not been arbitrarily chosen; but that they must have been selected on certain principles derived from the science of acoustics. But in the arrangement of them, the Sanskrita writers have been guided not by mathematical calculations, but by that higher faculty, called artistic consciousness. For the purpose of avoiding the tedious principles of ratios and proportions, they have adopted the easy convention of dividing the saptaka into srutis. It should be observed here that the principles which form the science of acoustics enter into Hindu music, though they are different in form from those of the European system. The science of acoustics, as it exists among us, is subservient to all the purposes of music.

A saptaka is the aggregate of the seven intervals from the first of a series to its repetition in the next. The Sañskrita writers have taken cognizance of enly three saptakas, the human organism of voice being too feeble to produce more. These are designated mandra, madhya, and tára, according to the places of their origin. The Vedantists have also made mention of only three saptakas, which are respectively called by them anudátya, sarit, and udátya. But the compass of a singer's voice upon the musical scales, in general, does not exceed two and half saptakas, some being able to sing distinctly the interval between the first note of the mandra saptaka, and the fourth note of the tára saptaka, and the last note of the tára saptaka. Instrumental music being but an imitation of the vocal one, our vina and other instruments are



generally adjusted to two and half saptakas. In fact, this extent of notes is quite sufficient for all the purposes of Hindu music.

We shall now give the reader a general idea of the kikali swaras or supplementary notes, called flats and sharps, with all the clearness that the subject admits of. When they undergo changes in their natural compass, the notes of the saptaka are divided into twelve kikali or vikrita swaras, forming our vikrita swaragrama, analogous to the chromatic scale of the English. These vikritas are met with, when the adoption of any other key than sharja varies the modulation, and brings about changes in the disposition of srutis. Of these, there are two descriptions; namely, komalas and tivras; i.e., flats and sharps. We may want to render a note somewhat higher, or somewhat deeper. When it is raised to one or more srutis of the succeeding interval, it is said to be rendered tivra or sharp; on the other hand, it is said to be rendered komala or flat, when it is depressed by one or more srutis of the preceding interval.

. It is necessary to observe here that any sound possessing musical quality is styled swara. It does not receive the character of suddha swara, or natural tone, unless it possess its full complement of srutis. Suddha swaras differ from swaras, chiefly by being prolonged so as to give the ear a more decided perception of their height, formation and relation to each other. Sharja, for instance, is the mere name of a swara. When it is heightened so as to contain four complete srutis, then and not till then

can it be designated suddha or natural sharja. Let us now illustrate the process by which the seven notes of the original scale are formed into twelve vikritas. In the first tetrachord, if ri is rendered two srutis lower in the scale, and reckoned as the key note; i.e., when sharja loses two from its full complement of srutis to rishava, the first note becomes possessed of two, and is rendered vikrita by being reduced to a semi-tone; and possessed of four srutis, ri at the same time becomes vikrita, by being increased to a major tone. Ri gains two srutis from sa, yet it loses one to ga, and retains only four. Gaining one sruti from ri, ga becomes possessed of three; i.e., the interval between ga and ma becomes a minor tone. Ma partakes of the nature of sa in both its suddha and vikrita or natural and artificial condition. It is generally rendered vikrita by being possessed of two srutis; i.e., by being reduced to a semi-tone.

Now let us consider what happens in the second tetrachord. In the madhyama grama, pa becomes possessed of three srutis, and is reduced to a minor tone; and dha, gaining one from pa, becomes possessed of four srutis, and is rendered vikrita by being increased to a major tone. Taking two srutis from the vikrita dhaivata, ni at the same time becomes kikali; i.e., the interval between dha and ni is reduced to a semi-tone, and that between ni and sa increased to a major tone.

The scale therefore would stand thus:-

Hence we find that our vikrita swaragráma differs from the English chromatic scale in this, that the former proceeds by semi-tones and srutis, while the latter, by a regular succession of semi-tones. It should be remarked that when we adopt any other note than sharja as the keynote, we find it necessary to interpose komalus and tibras; i.e., flats and sharps, according as the modulation may require one or the other, between various notes of the sharjagráma or natural scale; and ultimately we find that it is divided into twelve vikritas or artificial notes. These together with seven natural notes number nineteen.

Their fondness for fiction and mythology led the Sañskrita writers to adopt allegories in their classification of notes. In consideration of their nature and extent, the notes were ranged under four castes; namely, Bráhmana, Kshatriya, Vaisya and Sudra. Possessed of four srutis, and therefore considered as principal notes, sharja, madhyama, and panchama are placed in the first class. Next in order come rishava and dhaivata, composed as they are of three srutis. To the third class are assigned gándhára and nisháda, by reason of their containing only two srutis. In the last class are placed the kitkali swaras, they being very minute divisions of notes. In assigning the notes to different castes, the Sañskrita writers were prompted by no other motive than to distinguish their different classes; the principle being analogous to, if not the same with, that on which in Western music they are arranged under four heads; namely, the major tones, the minor tones, the semi-tones, and the artificial or chromatic notes.

With reference to their application in the composition of rágas, these notes are considered under four aspects: bádí, sambádí, anubádí and bibádí. On this subject, the information that has been furnished by the orientalists, is quite inadequate to enlighten the readers. It is our intention, and it shall be our endeavour, to give them a clear notion of these different kinds of notes, and to set forth the rules for ascertaining them as laid down by the Sañskrita authorities.

The laws with regard to bádí, sambádí, anubádí and bibadí guide us in the discernment and choice of those notes which are essentially important in the formation of rágas, and which immediately determine their true nature; of those which should be admitted, and of those which should be rejected in order to avoid offending the ear by incoherence. These laws, in short, are strictly observed in the melodic progression of a rága which loses its agreeable effect when any of them is least infringed. We find a parallel practice obtaining among the ancient Greeks under the name of petteia, a part of melopæia, which taught them what sounds they should reject, what they should admit, and what they ought to employ most frequently.

By bádí is meant that note which is always of the greatest utility in the formation of a rága, and immediately ascertains its peculiar character. Owing to its most frequent use and permanency, it predominates over all the other notes that are admitted into a rága, and plays the most important part. It behoves us to remark here that in rágabistára, or the extension of a rága, the performer may use any of the subordinate

notes he chooses more copiously than the leading or essential note; but it is not entitled to the name of bodiswara, by reason of its failing in the other requirement—permanency. Such notes are considered mere acc1dental or transient ones, they only gliding upon the melodic progression without ever forming essential parts of it. From the interpretation given to the term in the Sangita Darpana, it appears that badi is derived from the word badana, which means the power of producing ragas; and the note possessing it, is donominated the bádiswara. The next important note is called sambádí. It is homogeneal to bádí, and has a strong affinity with it. Sambádí is a great auxiliary to bádí in announcing the nature of a raga. Less in importance as it is than the leading note, it is less copiously employed than the latter, but more copiously than other subordinate notes. The latter are called anubádi, inasmuch as they immediately precede or follow the essential notes to which they are attached, and severally contribute, to some extent, to the development of a rága. They are in their nature the means between the two extremesconcord and discord. The last description of notes; i.e., bibádí, analogous to the antiphonia of the Greeks, is such a note as appears to the ear dissonant, and if employed in any raga, with which it is incompatible, destroys its melodious effect. The badi is aptly represented as the sovereign; the sambadi, as the mantri or prime minister; the anubadi, as his attendants; and the bibadi, as his enemy.

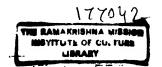
It is by the aforesaid laws that we are also enabled to ascertain the relation of agreement or of disagreement between any two notes.

The notes possessing the same aggregate of srutis are denominated sambádi; as for example, sa and pa, ri and dha, ga and ni, ma and sa. This rule is not without exception. Although both ma and pa consists of four srutis, yet as they are consecutive to each other, they do not pass for sambádi. The foregoing rule also serves to ascertain the notes related as sambádi, when the change of scale requires a different modulation. For instance, should we adopt pa as the keynote, ri of the original scale would become pa in the new scale. Thus we see ri and pa, possessed of the same complement of srutis, become sambádi or consonant. The Sangita Darpana has laid down another rule for ascertaining sambádi notes—a rule which has a direct application in both the natural scale and that formed by the change of key. The notes having eight or twelve srutis intervening between them are related as sambádi; as for example, ri and pa, ni and ma sharp, &c. Both the rules, we think, have the same bearing, and may be included under the following general rule:—

Such notes are considered as sambádi as are so related to each other, that if the former is adopted as the keynote, the latter becomes the fourth in the ascending scale; whereas, if the latter is taken as the fundamental. note, the former becomes the fifth in the descending scale, as appears from the following diagram:—

In the opinion of the Sanskrita writers, every two successive notes are always bibádi or dissonant; for instance, dha and ni, ri and ga, and so forth. The author of the Sangita Darpana holds that the notes having one srutis intervening between them, are also bibádi. In the opinion of the Sangita Ratnabali, the notes having thirteen srutis intervening between them, are considered as anubádi; and those having nine srutis intervening between them, as bibádi.

Harmony, in its modern import, is not admissible, nor is it of much importance in Hindu music; its predominant character being melody. Although notes may be combined as in harmony, conformably to the laws of bádí, sambádí, anubádí and bibádí, yet such chords when set to rágas and ráginis, far from improving and flourishing them, would rather infringe their genuine character. Mr. Willard and other eminent European authorities also subscribe to this position. With regard to the admissibility of harmony into our music, Captain Willard truly observes: "Indeed, so wide is the difference between the natures of the European and Oriental music, that I conceive a great many of the latter would baffle the attempts of the most expert contrapunist to set a harmony to them, by the existing rules of that science." Nevertheless, -Hindu music is not altogether void of harmony. Although harmony is not employed in our vocal performance, yet it is used, though very sparingly, in sristálankára, a kind of instrumental grace. To explain the nature of the chords, as they are employed in Hindu music, let us distinguish between the concords of harmony and those of melody. The former are the agreeable consonances of simultaneous notes; but these are not strictly applicable to melody, which is the agreeable



Gráma, in the musical acceptation of the term, signifies a series of notes arranged and disposed according to certain laws. It furnishes the basis in which the srutis, notes and murchchhanás inhere. In fact, the gráma is the condition of murchchhanás; but for it, their very reality would have been impossible. As the scunds in the gráma ascend and descend in succession towards acuteness and gravity, the murchchhanás naturally begin to exist. There are three such in Hindu music; and, in the opinion of some of the Sañskrita authorities, these are sharjagráma, madhyamagráma and gándhúragráma, of which the last has now fallen into disuse.

We shall now attempt to exhibit the different modulations of the three gramas; i.e., the different dispositions of scrutis in the scales; and explain the rules laid down by Sanskrita writers with regard to the deduction of the madhyama and gendle tragramas from the sharjagrama.

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Sharjagrama is defined by the author of Sangita Darpana and other Sanskrita authorities as the scale wherein panchama remains nirvikari or natural; i.e., keeps its proper position in the scale, and retains its full complement of srutis; and madhyamagrama, as that wherein the fifth note loses one to dha from its full complement of srutis, and is reduced to a minor tone. Let us now consider the foregoing definition in its full bearing.

It may be asked—why do the Sanskrita writers make the panchama and not any other note the basis of their definition? The reason is very clear. The first four notes are natural alike in both the grámas; it is in the fifth note that change first occurs in the madhyamagrama—a change by which it is distinguished from all other scales.

The foregoing definition of the madhyamagrama may at the first sight appear to be inexhaustive, inasmuch as it does not include the change which ni undergoes by being rendered two srutis lower in the scale. But it should be remembered that the reduction of pa to a minor tone, precludes the necessity of mentioning the other change, as it will, under the law of progression by srutis, follow as a necessary sequence. The following diagram will show the arrangement of srutis in the sharjagráma and how madhyamagráma is deduced from it:-

Sa . . . Ri . . Gs . Ma . . . Pa . . . Dha . . Ni . Si . . . Ri . . Ga. **U**adhyamagráma

From the above diagram, it appears that the sharjagrama consists of two disjunct, but perfectly similar tetrachords separated by a major tone. From this, the madhyamagrama is deduced by the diminution of the interval between pa and dha by one sruti, and by rendering ni two srutis lower in the scale. Thus we find that the interval between pa and dha is reduced to a minor tone, and esteemed as rishava; and the interval between dha and ni to a semi-tone. In this case, the interval between dha and ni being a semi-tone, that between ni and sa must be a major tone; and it is considered as madhyama.

We shall now attempt to explain the construction of the gándhúra'grama, and the peculiar changes set forth by the Sangita Durpana in the
disposition of the srutis in the scale.

Gándháragráma is deduced from the primary gráma, and not from the madhyamagráma, as is supposed. If ga takes one sruti from ri, and another from ma, and becomes thus possessed of four; or in other words, ri being lowered by one sruti, and ma raised by one sruti, if the interval between ga and ma becomes a major tone, the scale formed with reference to it as the key-note, is denominated the gándháragráma. It is necessary to remark here, that gándhára to be the gráma or fundamental note, should be reckoned as sharja, and, as a matter of course, should consist of four srutis. The other changes characteristic of the scale are as follows:—

1st.—The four *srutis* of madhyama from the interval between the fourth and the fifth in the sharjagrama; by giving one to ga, it consists of three *srutis*; *i.e.*, it is reduced to a minor tone.

2nd.—Ni takes one *sruti* from dha, and another from sa, and becomes thus possessed of four; or in other words, ni being depressed by one *sruti* in the scale, and sa raised one *sruti* higher, the interval between ni and sa is increased to a major tone.

3rd.—Sa losing to ni one from its full complement of *śrutis*, retains three; i.e., by rendering sa higher by one *śruti*, the interval between sa and ri is reduced to a minor tone, and taken as dhaivata.

There is another change yet to be mentioned. Dha taking two srutis from pa, reduces it to a semi-tone, and losing one to ni, becomes itself possessed of four srutis. But this change is not peculiar to this grama. The following diagram will show how gandharagrama is formed from the sharjagrama:—

We hold with the author of Ratnabali and several other Sanskrita authorities that the word grama denotes the note in reference to which the relative heights and distances of the six other notes of the octave

are ascertained. The three gramas considered in Hindu music, are nothing but the first or lowest notes of the three saptakas to which the whole compass of the Hindu scale is limited. The very interpretation of the word sharja implies that it is the foundation of the saptaka. In so far as they pre-suppose a sharja, the other notes do not admit of being taken as gramas. Each of the other notes, considered apart from some sharja underlying it, may be taken as sharja itself. From the above circumstances, we are warranted to conclude that sharja is unquestionably the primary gráma, in the strict sense of the term, and that all other notes are not entitled to bear the name. Such being the case, we may be asked why are then some of the instruments tuned in fourths and fifths? Properly considered, each of the other notes may be adopted as the key-note. The scales which may be thus formed, are not, strictly speaking, grámas, but are esteemed as thatas or modes. The reason why the viná is tuned in fourths is clear from the nature of the instrument. It has been already stated that, although the three saptakas to which the whole scope of Hindu music is confined, are considered as natural, yet the human organism of voice is not so powerful as to produce more than $2\frac{1}{2}$ saptakas. In imitation of vocal music, the finger-boards of our instruments also are adjusted so as to exhibit the same extent of notes. Such being the case, ma, which occupies the middle position in the octave; i.e., between two perfectly similar tetrachords, must be adopted as the keynote; otherwise the compass of notes would either fall short of or exceed 2½ saptakas, allowable in practice. To be more explicit; should viná, instead of being tuned in fourths, be successively tuned in thirds, seconds,

&c., the extent of notes would fall short of $2\frac{1}{2}$ saptakas; and again, should it be tuned in fifths, sixths, &c., the extent would by degrees exceed the limit. It is in consequence of this limitation, that ma has been taken as the fundamental note in preference to others. We should therefore persuade ourselves to believe that madhyamagráma originated in the peculiar construction of certain favorite musical instruments of the Hindus. Another, and perhaps the chief reason for ma being adopted as the gráma, appears to be that it is sambádí or concordant to sa, the primary gráma; and that the scale formed with it requires very few vikrita swaras or supplementary notes. For the same reason pa is also reckoned by some as a secondary gráma.

In the whole compass of the Hindu scale, there are twenty-one murchchhanus each saptaka containing seven. To exhibit them, a little dexterity is required. When each of the notes of the three saptakas is individually produced, it cannot be named murchchhanu. By this term we mean the extending of a note to another in the ascending as well as in the descending scale, without any intermediate break in the disposition of the srutis in the interval. In the production of murchchhanus, contiguity between the different degrees of notes is strictly observed; for a least interruption in the continuous flow of the srutis that run through them, detracts much from the beauty and agreeableness of the rugas, wherein murchchhanus are employed. The murchchhanu is defined by the author of the Sangita Darpana to be the ascension or the descension of the seven notes in succession in the scale, which renders them fit



for producing the rágas. The múrchchhanás are, in fact, the essential ornaments of rágas, and contribute in no scanty measure to their extension and development. Rágas without múrchchhanás are as flowers without fragrance. In álapa too, they play an important part.

Mürchchhanás may arise from any of the three grámasthánas. But it is the practice with us to commence the műrchchhaná of the sharjagráma from the first note of the middle octave, and that of the madhyamagráma from the fourth note. The following tables will show the different műrchchhanás of the two grámas, with the names assigned to them:—

	Th	Their names.					
Sa.	Ri.	Ga.	Ma.	Pa.	Dha.	Ni.	Uttarayatá.
Ni.	Sa.	Ri.	Ga.	Ma.	Pa.	Dha.	Uttara Mandrá.
Dha.	Ni.	Sa.	Ri.	Ga.	Ma.	Pa.	Ranjaní.
Pa.	Dha.	Ni.	Sa.	Ri.	Ga.	Ma.	Manjari.
Ma.	Pa.	Dha.	Ni.	Sa.	Ŗi.	Ga.	Aswakrántá.
Ga.	Ma.	Pa.	Dha.	Ni.	Sa.	Ri.	Abhiruhitá.
Ri.	Ga.	Ма.	Pa.	Dha.	Ni.	Sa.	Suddhasharjá.

INTRODUCTION.

The Műrchchhanás of Madhyamagráma.							Their names.
· Ma.	Pa.	Dha.	Ni.	Sa.	Ri.	Ga.	Saubiri.
Ga.	Ma.	Pa.	Dha:	Ni.	Sa.	Ri.	Drabirasvá.
Ri.	Ga.	Ma.	Pa.	Dha.	Ni.	Sa.	Kalopantá.
Sa.	Ri.	Ga.	Ma.	Pa.	Dha.	Ni.	Nutika.
Ni.	Sa.	Ri.	Ga.	Ma.	Pa.	Dha.	Suddhamadhyá.
Dha.	Ni.	Sa.	Ri.	Ca.	Ma.	Pa.	Íshtá.
Pa.	Dha.	Ni.	Sa.	Ri.	Ga.	Ma.	Paurabí.

We need not exhibit the murchchhanus of the gandharagruma, as it has fallen into disuse. As an instance of the murchchhanus of the scale which comprises six notes, those of a scale from which ni has been left out, are represented below:—

							Names.
. •	Dha.	Pa	Ma.	Ga.	Ri.	Sa.	Chaturmasya.
Dha.	Pa.	Ma.	Ga.	Ri.	Sa.	υ	Sambhásya.
Pa.	Ma.	Ga.	Ri.	Sa.	0	Dha.	Artha.
Ma.	Ga.	Ri.	Sa.	0	Dha.	Pa.	Chaturtha.
Ga.	Ri.	Sa.	0	Dha.	Pa.	Ma.	Sautramoni.
Ri.	Sa.	0	Dha.	Pa.	Ма.	Ga.	Chitra.
Sa.	0	Dha.	Pa.	Ma.	Ga.	Ri.	Udbhida.



Múrchchhaná is distinct from gamaka with which it is generally confounded, the latter being a tremulous motion of voice, produced by the rapid contraction and extension of the vocal chords. The gamaka is nothing but the reiteration of the same note. It is one of the several graces used in Hindu music, and plays an important part in the manifestation of a raga. We shall now describe the manner of producing múrchchhaná in vocal as well as in instrumental performance. In the former, the vowel sound of the letter from which the múrchchhaná commences, is continued to the note to which it is intended to extend, in one unbroken stream of voice; while in the latter, the múrchchhaná is produced by the string relating to any fret being drawn out with pressure, either by the forefinger, or by the middle finger, to express any of the succeeding notes to which it should extend.

Múrchchhanás may be brought about not only in the natural scale, but also in the vikrita swaragráma or artificial scale. In all we have fifty-seven pieces of múrchchhanás in the whole scope of the Kindu scale, both natural and artificial. In each of them, there are sixty-three pieces of alankáras, or excellent, orderly arrangement of notes. Of the various styles of alankáras, two instances only are given below:

Sa ri sa ri ga, ri ga ri ga ma, ga ma ga ma pa, ma pa ma pa dha, pa dha pa dha ni, dha ni dha ni sa.

Sa sa, ri ri, ga ga, ma ma, pa pa, dha dha, ni ni, sa sa.

By mátrá, the Sanskrita grammarians mean the measure of time in pronouncing a vowel sound. According to the authors of Baidyashastras or

medical treatises, it signifies the brief space of time occupied by a single beating of the pulse, or by the twinkling of an eye. But in the import attached to it in some of the musical treatises, the term denotes five times the length of a short vowel. Thus, we find there is a diversity of opinion as to the acceptation of the word matra. But whatever be the meaning assigned to it by others, in our opinion, the musicians may take any equal interval of time as a mátrá. The grammarians reckon four sorts of matrás; namely, laghu, guru, pluta and ardha; but in Sangita, besides these, a fifth named anu is included. The laghu mátrá is the measure of time in uttering a short vowel; guru mátrá is double the length of a laghu mátrá or simple sound; the pluta is the protracted sound, being three or more times the length of a short vowel; and the ardha and the anu mátrá are respectively half and one-fourth of a lughu mátrá. In the present practice, the performers may adjust the value of a mátrá to his will and intention; but whatever be the quantity of duration he would assign to it, the guru, pluta, ardha and anu matras should be taken in proportion to its value. These different descriptions of mátrás are indispensably necessary for regulating the course of srutis, murchchhanas, tunas, alapas, gitas and chchanda or rhythm; and constitute an essential of music.

Time in Hindu music is named tála. The tálas widely differ from the modern measures of European music. They rather resemble, though not in every respect, the rhythmical measures of the Ancients. Our tála is metrically divided by a certain arrangement of mátrás; whereas 'Time' in

the modern music of the Western nations, observes no such division. word tala simply means the beating of time by clapping the hands. give an accurate idea of its general signification in music, some preliminary observation is necessary. The eternal duration of time is in Sanskrita called laya. It is beyond the power of the human intellect to conceive of such a thing independently of the external events. When any portion of infinite time is determined by the succession of two events, we are enabled to recognise it. In the acceptation in which it is taken in music, the word laya signifies the stream of time that runs through a piece or composition from the instant of its adoption to that when it is dropped. There are three kinds of it reckoned in music; namely, bilambita, madhya and druta. The bilambita and the madhya laya are respectively the slower and the quicker course of time, in respect of its normal movement, the madhya laya. It is when laya is measured conformably to chhanda, or regular and symmetrical arrangement of matrix that it can be construed to mean tala; and as a matter of course, the movement of tila is determined by that of laya. Tila follows chhanda, and is employed to guide its movement. It is a practice with us to beat time with a strict regard to the matras to which measures are restricted, in order to see whether the chhanda of a piece is moving on its proper Properly speaking, tâla is synonymous with chhanda or regular metre. It is from chhanda that gita derives that regularity and symmetry which pervade it. Music without chhanda is just as body without soul, or coloring in painting without design. It is of such importance, that, without it, music loses all its power over the human passions. With



regard to the utility of chhanda in music, Nathan truly observes: "Music is designated for nobler purposes than merely to please the ear; she is intended to speak to the judgment. But unaided by good poetry, her spell is partly broken, and the bright wreath of her fame droops and withers. Pure composition unites music and poetry in indissoluble bonds; and so intimate is their connection, so equal their value, so indispensable the strictness of their union, that the rules of sense and propriety render them the echo of each other."

It should be here observed that at least four mátrás are requisite for constituting a measure; for less than that number passes away too swiftly to enable us to perceive laya. We are accustomed to beat time by means of certain conventional words and letters; and the act of doing so is called sangata. There are various styles of sangata, according to the variety of chhanda.

We generally find that the Europeans who have devoted themselves to the researches of Hindu music, widely differ in their opinion as to the import of the terms raga and ragini; but none has, it seems, attained any thing like an accurate idea of them. It is our intention, and it shall be our attempt, therefore, to elucidate this obscure but important subject, and to give some idea of their peculiar nature. Nathan, a renowned author of European music, holds that raga signifies major mode, and ragini a minor mode. In the opinion of Sir William Jones, the word raga has also the same bearing. J. F. Danneley, in his Encyclopædia of

Music, says: "A mode or scale is called major, when its third diatonic note is composed of four chromatic degrees; or is the fifth diatonic-chromatic note of the scale, called also the major third; as, C-natural Enatural, C-sharp E-sharp, &c." He further observes: "A mode or scale is said to be minor when the third note, called the minor third, is composed of but three chromatic degrees; as C E-flat, D F-natural; in opposition to major, the third note of which is composed of four chromatic degrees." But the acceptation in which raya and ragini are taken by us, widely differs from the aforesaid definitions, a mode rather resembling our tháta. We shall here cite a passage from Captain Willard, an accomplished scholar of Hindu music, to bear out our opinion. He says: "The word 'mode' may be taken in two different significations, the one employing manner of style, and the other a key; and, strictly speaking, this latter is the sense in which it is usually understood in music. Mode in the language of the musicians of this country (India) is in my opinion termed thata, and not raga or ragini."

In the opinion of Dr. Cary, the word raga signifies tune. But Willard says: "It is not strictly a tune according to the acceptation of the word." Danneley defines tune as follows: "The most general idea attached to this word is that of piece of music composed of a certain number of melodic phrases joined by regular and symmetrical forms and terminating in the same key with which it begins." But raga, according to its imports in Hindu music, does not strictly observe any such regularity and symmetry in its composition; nor does it always being with the key in



which it terminates. How can then the term, "tune," be considered synonymous with rdga? It is somewhat like our gata. A gata is rhythmically divided by tala; as a tune is divided into equal portions by bars. In a Hindu rága, there is no fixed rule with regard to tala or rhythmical progression; and, as a matter of course, it needs not to be divided by bars, which mark the exact measurement of time. Tala is essentially necessary for the formation of a gata; while no such necessity exists with regard to ragas. The different kinds of sounds; namely, the short, the long, and the protracted, ranged and disposed in various successions, regular and irregular, suffice to constitute ragas: nor can raga be construed into song; since various songs may be set to a particular raga. On this point, Willard truly observes:-"It is not likewise a song, for able performers can adapt the words of a song to any rágini; nor does a change of time destroy its inherent quality, although it may so far disguise the ragini before an inexperienced ear as to appear a different one." It is when words are set to a rága, and when rhythm given to it, that it can mean a song.

Again, rága is not tháta, as some suppose. Tháta is not a Sañskrita but a Prákrita word, and means a mould. As in a mould, certain ingredients, variously mingled, may be wrought into articles of various kinds, so in a tháta, the notes, arranged in different but peculiar orders of succession ascending or descending, with their various múrchchhanás may be formed into a variety of rágas.

The following extract from Willard will corroborate our position:-"As amongst us there are two modes, the major and the minor, so the natives have a certain number of thatas, to each of which two or more ragas or ráginis are appropriated. If these signified mode, each should require a different arrangement, which is certainly not the case. Any one may convince himself of this, by procuring a performer on the Sitar. This instrument has movable frets that are shifted from their places, so that when the instrument is properly adjusted, the fingers of the left hand running over them produce those tones only which are proper for the mode to which the frets have been transferred, and no other. Let the Sitar-player be desired to play something in the ráginí Áláhiya, and after he has done that, tell him to play some other ragini without altering the frets, and it will be seen that other raginis may be performed on the same thata. On the other hand, after he has played Aláhiya, let him play Lalita or Bhairavi or Káphi, &c., &c., and he will be obliged to alter the tháta or mode by shifting the frets. A thata comes nearest to what with us is implied by a mode, and consists in determining the exact relative distances of the several sounds which constitute an octave, with respect to each other: while the ragini disposes of those sounds in a given succession, and determines the principal sounds. The same thata may be adapted to several ráginis, by a different order of succession; whereas no rágini can be played. but in its proper tháta."

Rága should not likewise be confounded with grama; in a grama, there may exist numerous ragas. It is rather similar to the English scale.

In the import attached to it by the sage Bharata and other Sanskrita authorities, raga signifies an effect on the mind, produced by the agreeable relation of successive notes; each raga having some affinity with certain feeling or affection of the mind. To all those that have no insight into Hindu music, this definition will not appear quite intelligible. We therefore attempt to define it in a manner which will enable them to understand the nature of the thing. By raga is implied the agreeable effect of any determinate succession of notes, employed with a strict regard to the laws of bádí, sambádí, anubádí and bibádí, arranged with múrchchhanás, and of proportional lengths with respect to the nature of the laya, or the ad libitum movement that runs through its full time. It is not confined to regular measure. It has some resemblance to the melody of the ancient Greeks, which was conducted on the same principle as our rágas. composition of melody, as we have already stated, they were guided by the rules of melopoia which taught them to discern and choose those sounds which should be rejected, those which should be admitted, and those which should be most frequently employed. In our ragas, we also observe the same rule. With reference to its influence on the human mind, the melody was classified into three species; namely, the systaltic, the diastaltic, and the enchastic. Our ragas likewise vary according to different rasas or sentiments. These are usually enumerated sringara or love, hasya or mirth, karuná or tenderness, raudra or anger, víra or heroism, bhayánaka or terror, vibhatsa or disgust, and adbhuta or surprise.

With regard to their composition, the ragas and their variations are divided into three jati or species: suddha, salanka, and sankirna.

The suddha rágas are such as are simple and original; the súlanka are those that bear an impress of some other rága; and the sañkirna are such as are compounded of súddha and súlanka. These are again sub-divided into three classes; namely, sampúrna, oraba and khúraba. All those rágas whose scale consists of seven notes, in any fixed succession whatever, come under the first class; those whose scale comprises six notes, belong to the second class; and those whose scale is composed of five notes, fall into the last class.

The three prominent notes in each raga are called graha, nyasa, and ansa. The note with which a raga begins, is named graha; that in which it ends, nyasa; and that which is most frequently used and predominates over all the other notes, ansa. The latter is the same as badi, and is the origin of the graha and nyasa. According to the Sanskrita authorities, the same note should be the graha and nyasa; but in modern practice, this rule is not strictly observed.

Ragas are not sung more than once in their simple form, but are varied on their repetition by tanas, performed by means of murchchhanas and gamakas. These are not considered essential to ragas, but are introduced to embellish them according to the pleasure of the performer, with this restriction that in such graces, he should always confine himself to peculiar notes of the ragas. It should be observed in passing that in the formation of a raga, at least five notes are required; while two notes may go to constitute a tana. Tanas, as applied to ragas, are of a

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similar nature to those of a song, with this chief distinction that in the former they do not follow any regular measure; whereas in the latter they do so. Of tinas there are two species: śnddha and kuta, each comprising a great variety of styles.

It is a practice with singers, before commencing a song, to develop the character of the rága to which it is set, by means of gamakas, műrch-chhanás and tánas. Such a practice is called alápa, in which the performer should adhere to the notes peculiar to the rága, and pay strict attention to the laws of bádi, samvádi, anubádi, and bibádi, as also to añsa, graha, and nyása. In alápa, there is no fixed rule with regard to tála; but the notes should be of proportional lengths with respect to the nature of the laya, or the ad libitum movement that runs through its full time. Alápa like gita is arranged into four parts, called barnas. The first part where the notes glide on slowly so as to manifest the character of the rága, is called the asthayi; the second part where the singer ascends to a higher scale, the antará; the third where both asthayi and antará are blended together, the sanchári; and the fourth where the rága is dropped, ábhoga.

Rága, when rhythm is given to it, receives the character of gita, the essential elements of the latter being notes and mátrás. The name of gita applies to all measured strain of music, whether vocal or instrumental. The most essential characteristics of kanta-gita or vocal music are raganga, bhashánga and kriánga; i.e., rága, language and activity of execution; while all other qualifications required in it, pass under the name of upánga, or secondary characteristics. These, when combined with good taste,

compose the maximum of vocal excellence. Of vocal music, there are various styles, such as svaragráma, tribata, visnupada, dhrubapada, and many others.

There are four principal systems of Sañskrita music, of which the first is derived from Brahmá; the second from Bharata; the third from Hanumanta; and the four from Kalvinatha. The best and most primitive of these systems is that of Brahmá. Besides these, there are several other minor systems, such as those of Matañgaja, Kahala, Somesvara, Devarája, Kshetrarája, Bhojarája, &c. These are all very ancient, and have been deduced from the four principal ones. On the aforesaid systems, primary and secondary, again, have been built many excellent and valuable works on music, among which the Sañgita Darpana by Damodaramisra, the Sañgita Náráyana by Náráyanadeva, the Sañgita Ratnákara by Sárangadeva, and the Narttaka Nirnaya by Pundaríka Bichchhala are much extant among us.

But we find a diversity of opinion as to the system, according to which music has all along been practised. In fact, we do not conform to any particular system in our present practice, but are guided by rules and directions from various authorities.

In the opinion of the best and greatest of authorities, the six original rigas are named Śrirága, Vasanta, Panchama, Bhairava, Megha and Nattanáráyana, and are restricted for their performance to particular times and seasons. They are each represented as a demi-god, wedded to six ráginis or nymphs. We shall give their personifications and descriptions in the course of the book.



Before we finish this Introduction, a few observations need to be made on the Indian system of notation, and a description of the signs and symbols that have been used in this book, should be given. The notation extant among us is not a recent invention, but is found to occur in the Rágabibodha—a fact which proves that it has its origin in an age beyond the light of authentic history. As a proof of its antiquity, we beg to refer you to a printed form of notation, written in the oldest Sanskrita character, of Vasantarága in Sir William Jones' Musical Modes of the Hindus in the Asiatic Researches. Owing partly to long disuse, and partly to the loss of authorities, the notation has come down to us in a crippled form, many of its signs and symbols having become obsolete, or having been buried in the depth of time. Had it not been the case, the practice of Sanskrita music would not have been almost wholly lost, and its rich . treasures would not have suffered so much wreck. To impart our music in its present form, a permanent character, and to facilitate the acquisition of its knowledge, we have thought it advisable to revive our ancient national notation, with such modifications and improvements as are necessary for adapting it to modern requirements.

In imitation of the original Sanskrita notation, we represent our modern music by means of one line, with the initials of the seven notes, and with certain signs suited for the purpose. We have also three-lined notation extant among us. This is an innovation introduced by Professor Kshetra Mohana Goswamí, for the reason that the three saptakas to which Hindu music is confined, are very aptly represented by three lines; the notation in

one line is however sanctioned by ancient usage. We might be asked the reason why we do not introduce the English system of notation into our music. To this we reply that European music being of a different nature from Hindu music, the notation that obtains in the former is quite unfit for representing the latter. It is generally admitted that every civilized nation that has a music of its own, has also a peculiar system of notation for representing it. Whatever the nature and form of that system, be it a rude, or be it an advanced one, it is well adapted to the peculiarities of the music it is intended to express, and can by no means be aptly rendered into the notation of another nation, however improved and scientific it may be, without the latter being subjected to some modifications. Our system of notation, it must be observed, is simple and convenient, and satisfies all practical requirements. If we were to adopt the English notation with some modifications for srutis, some more for murchchhanas and various other graces, and some more for a great variety of talas, &c., how cumbrous and complicated it would appear! Surely, it would be more difficult of comprehension than our national system.

The notes constituting a saptaka, are generally indicated by sa, ri, ga, ma, pa, dha, ni, which respectively correspond with the notes of the diatonic scale, C, D, E, F, G, A, B.

The three saptakas, which are commonly used in Hindu music, are represented in the stabaka or staff below:—

CDEFGABUDEFGABUDEFGAB.

The first seven notes that have the dots under them, belong to the mandra or lower saptaka; the next seven notes to the madhya or middle saptaku; and the last seven notes that have the dots over them to the tára saptaka. Among the three saptakas, the madhya saptaka is the standard. If we require to note down saptakas higher or lower than the three already shown, as many dots must be used over or under the notes as they are higher or lower than the middle or standard saptaka. Thus, the note C would indicate that this C is two saptakas higher than the corresponding note of the madhya saptaka, or one saptaka higher than the corresponding one of the tára saptaka. Similarly, C would show that this C is two saptakas lower than the corresponding note of the middle saptaka, or one saptaka lower than the similar one of the mandra saptaka.

The three saptakas noted down in the above staff, are sufficient for the purpose of our vocal music. The provision for more saptakas than three is required for representing instrumental music, or the music of other nations.

The patáká (Γ) is the sign for tivra swaras or sharps, and the trikona (Δ) is for komala swaras or flats, both of which are placed upon the notes. Thus, Γ stands for Γ sharp, and D for D flat

When the signs for tivras and komalas have a dot upon their fiead, they represent atitivra (very sharp) and atikomala (very flat). Thus F



stands for very sharp F, and D for very flat D. Atitiva and atikomala are the minute divisions of notes used in some of our melodics.

There are, let us recapitulate, three species of matras; namely rhaswa dirgha and pluta. The measure of time in pronouncing a short vowel, is called the rhaswa matra; dirgha matra is twice the length of a short vowel, and pluta matra, three or more times the length of a short vowel. They are respectively represented by one, two and three or more perpendiculars, which are placed upon the notes; thus C, C, and C, D, &c., &c., rhaswa matra is again divided into ardha (i. e., half) and anu (i. e., quarter) matras. The sign (\sim) for ardha-matra, called in Sañskrita ardha-chandra-chinha or crescent, and that (\times) for anu-matra, called in Sañskrita dhamaru-chinha, are placed upon the note; thus, C D C D C D &c., &c.

If two or three notes are written in one place, but if the sign for matra falls only upon the first note, and the notes that succeed it are tied together by a sign of bandhani (|), all the notes placed after the first note, should be expressed according to the value of that note; e. g.,

CDE. Again, if one or two notes are tied together by the sign of bandhani, but are not marked with the sign of matra, the sign of matra falls upon a separate note placed after them. In such case, the note on which the sign of matra is given, embraces its previous notes in the same

proportion of time, e. g., CD E. Sometimes, the sign of matera falls

in an empty place—a place where there is no note. In such case, time must be allowed up to the vacant place; e.g., C D E

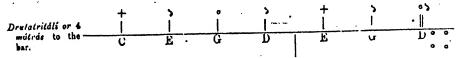
Tálas are formed from simple, compound and broken mátrás, from the various arrangements of which, they derive their different names; e.g., nine mátrás constitute the tála named ārā; six ektála, &c., &c.,

Tala consists of two principal actions; namely, aghata and birama—the beating and the rest. The sign of the former (>) and that (•) of the latter are placed upon the sign of matra; thus:— $\frac{1}{C}$.

According to Sañskrita music, the first beating of a tála is named sama, the sign of which (+) lies upon the sign of mátrá, and is represented thus:—c. The space of time from sama to biráma is called in Sañskrita a mancha. Every mancha, according to the number of mátrá, is divided by perpendicular lines, called bibhájaka rekhá (|), which might be expressed in English as bars.

The padma chinha (::) or the sign of the lotus-flower indicates the completion of a melody, a song or an air.

EXAMPLES OF TALAS USED IN THIS BOOK.

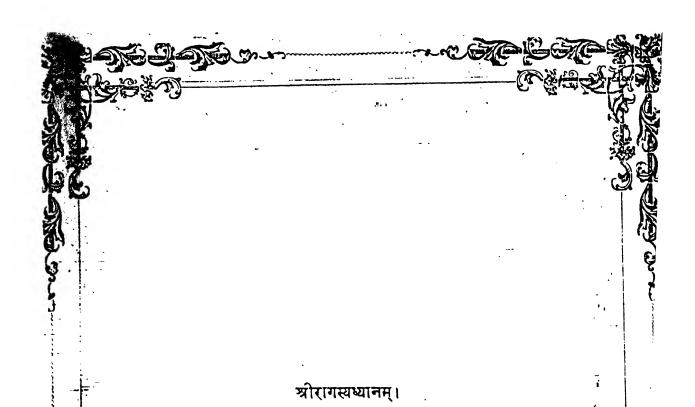


Six Principal Zagas bt the Zindus.

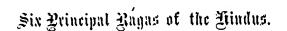


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srirága.



चीलाविहारेण वनान्तराले चिन्वन् प्रस्तनानि वधूसहायः। विलासवेशो धृतदिव्यमूर्त्तः श्रीराग एषः विष्तः ववीन्द्रैः॥

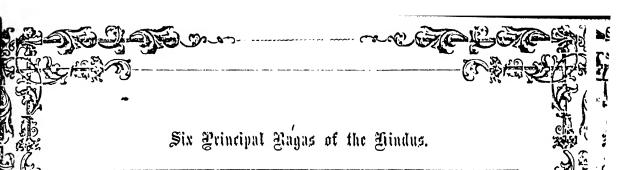


The Meditation of Sri Raga.

The demi-god Sri Raga famed all over the earth sweetly sports with his nymph, gathening fresh blossoms in the bosom of you grove, and his diving lineaments are distinguished through his graceful vesture.

This Raga is sung in the Dewy Season, genegally in the evening.

Six Principal Ragas of the Vindus. SRÍ RÁGA. TALA ARA. (Å F Å) ASTHAY Antara.



(1)

Srirngn.

Of the six original rágas, Sririga is the first. Its performance is restricted to the dewy season. It is a practice with us to sing it at the close of the day, with the use of three vikritas: a-very flat, d-very flat, and f-sharp. There is no necessity of f-natural in its performance. Quartertones enter into its composition, d and a being rendered three srátis lower than in the sharjagrama. It belongs to the class, called sampúrna. It has c for its bádi, and d-very flat for its sambádi, while it begins and ends with c. Some of the musicians sing it with d-very flat as its bádi and a-very flat as its sambádi. In Southern India it is performed at noon with the omission of e and a.





Six Brincipal Bagus of the Findus.



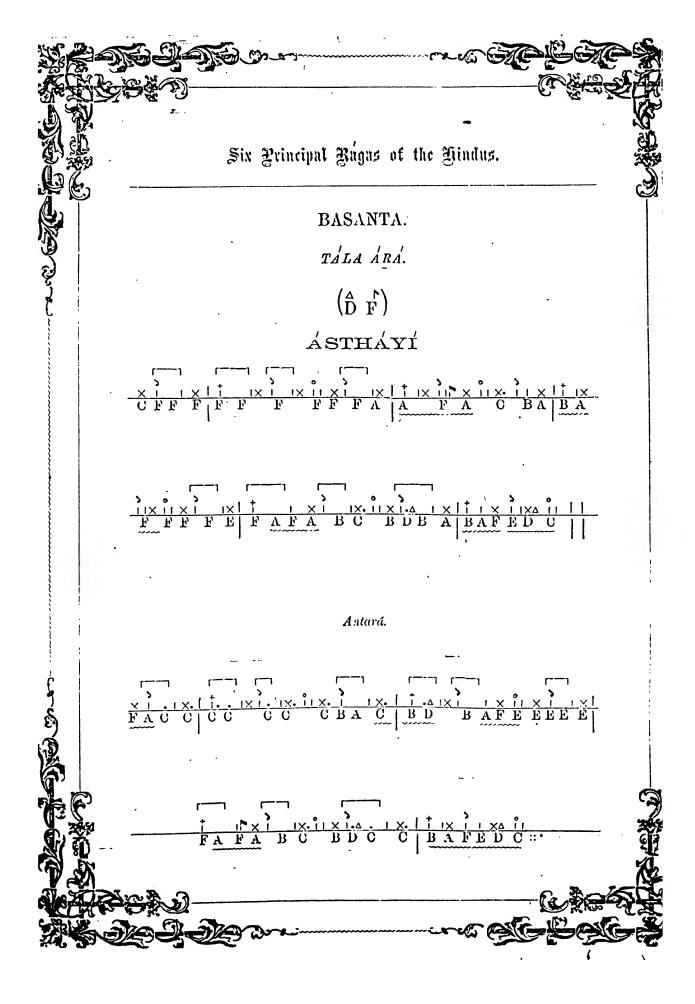
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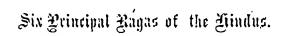
BASANTA

The Meditation of Basanta Raga.

This Bugu is peppesented as being of a golden line, diessed in yellow gayments and having his ears ornamented with the blossoms of the mango. His lotus-like eyes are polling round and are of the colour of the vising Sun. He is loved by the females.

This Baga is sung in the Spying.





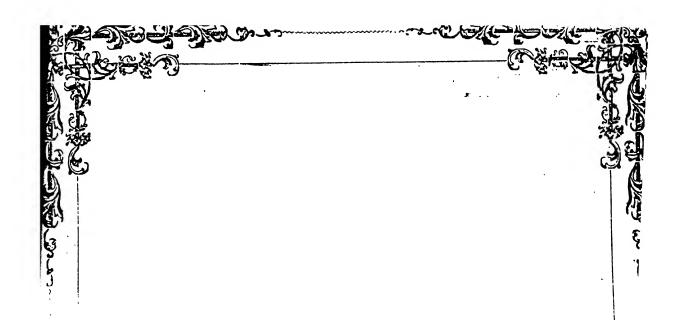
(2)

Vasanta.

Of the six principal rágas, Vasanta is the second. It is assigned for its performance to the spring. It is sung with the use of two vikritas: d-flat and f-sharp, and with the omission of g. It belongs to the class, called sháraba, and has f for its bádí and c for its sambádí. It begins and ends with c.

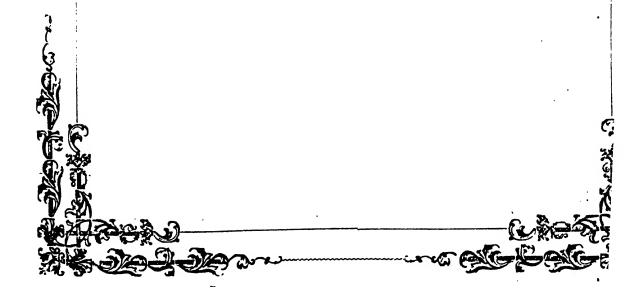
hith: and printity heistenery Dose.

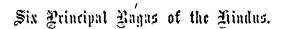
BHAIRABA



भैरवरागस्य ध्यानम्।

गङ्गाधरः शशिकलातिलकस्तिनेचः सर्पेविभूषिततनुगंजक्षत्तिवासाः।
भास्वचिश्र्लकर एष चमुण्डधारी शुस्राम्बरो जयति भैरवरागराजः।





The Meditation of Bhainaba Raga.

The appresentation of this Baga mostly appendict that of Mahadev. He beaus the Ganga on his head. His foughtead is adopted with the appearant moon. He has three eyes. His body is encipaled all over with sequents. He weats white clothes. Holds a shining trident in one hand, and human shall in the other.

This Baga is sung in the Autumn.



(3)

Blinirava.

Of the six original rágas, Bhairava is the third. By some its performance is assigned to autumn, and by others to summer. In our modern practice, however, this rága is not exclusively restricted to any particular season, but is sung in the morning of all the seasons. It is performed with the use of d-very flat, a-flat, b-flat. Herein also we find the application of quartertones. This rága belongs to the sampúrna jati, and has f for its bádi or añsa, and c for its sambúdi. It begins with b and generally ends with c; but here it terminates with the añsa.

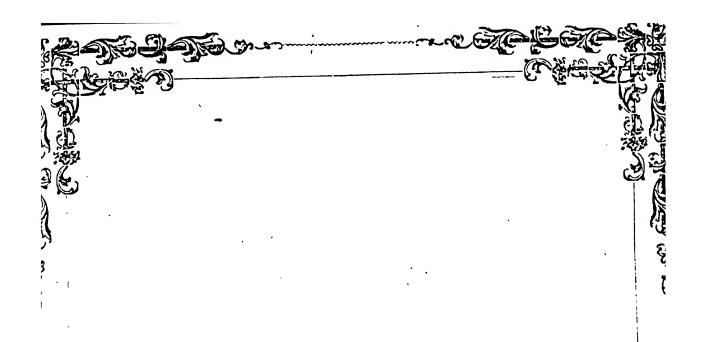
Six Principal Zagas of the Aindus.



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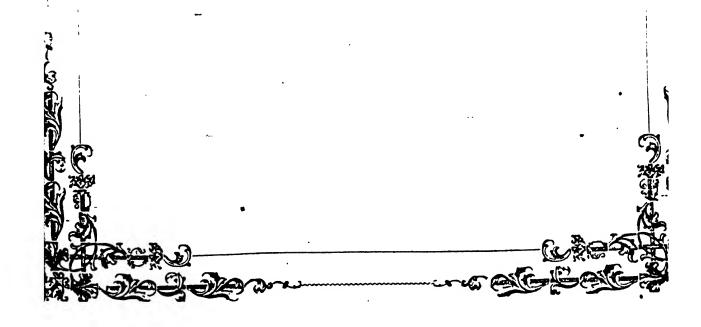
PANCHAMA.

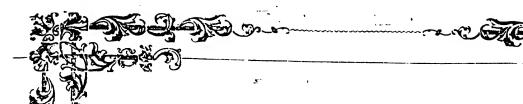
Culcuitte



पचमरागस्य ध्यानग्।

रत्ताम्बरे। रत्तविशालनेचः ऋङ्गार्युत्तस्तरुणो मनस्वी। सदा विभात्येष हि पच्चमेऽयं योषित्प्रियः कोक्लिसम्जुभाषी॥



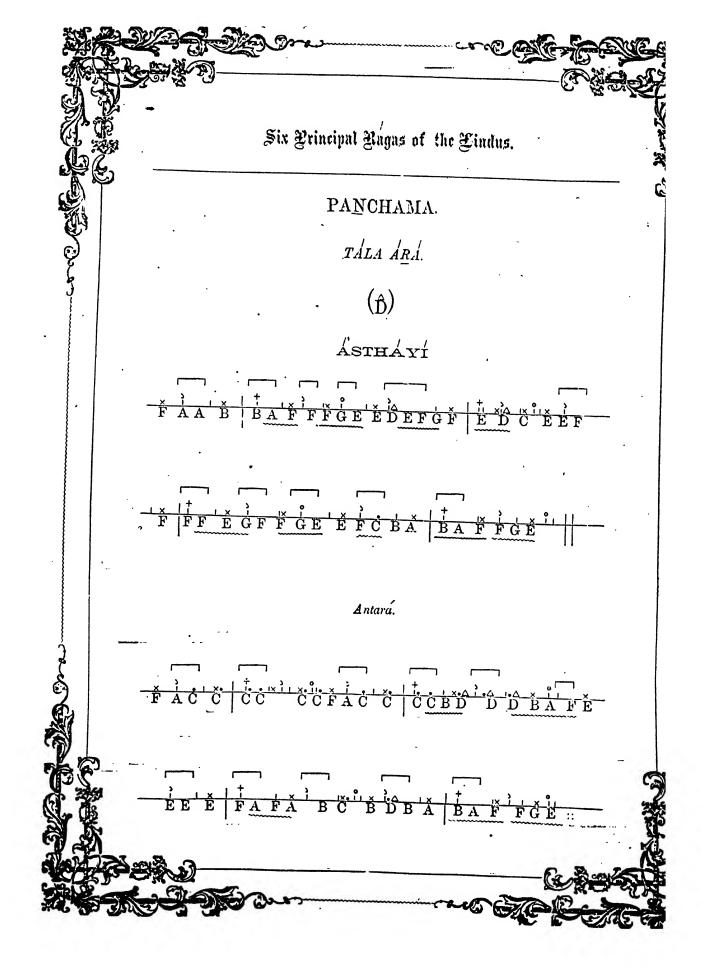


Six Principal Ragas of the Bindus.

The Meditation of Pangkama Raga.

This Baga is described as having lange ned eyes wearing ned clothes, young, intelligent and of an amonous disposition.

This Kaga is sung in the Summey.







Six Principal Ragus of the Findus.

(4)

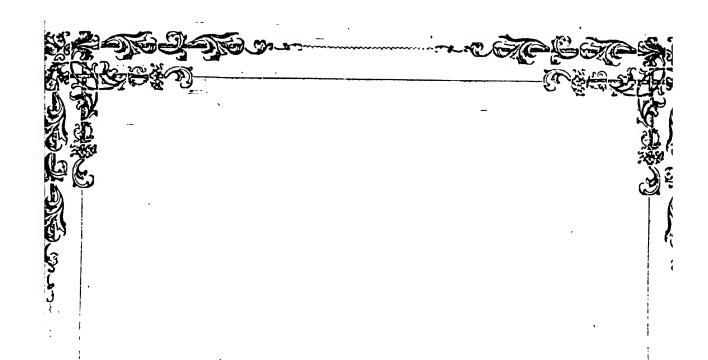
Annehnmn.

Of the six original rágas, Panchama is the fourth. In the opinion of some of the Sañskrita writers, its performance is considered opportune at autumn; in that of others, at summer. However, in practice, it is sung at the close of the night. There is a diversity of opinion as to the class it belongs to, some singing it in a scale comprising seven notes, others with the omission of g. In our performance, we conform to the former practice. In this rága, only one vikrita, namely d-flat, is used. It has f for its bidi or añsa, and c for its sambádi. It begins with the añsa and terminates with c.



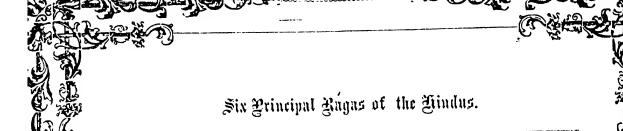
Six Frincipal Bagus of the Bindus.





मेघरागस्य ध्यानम्।

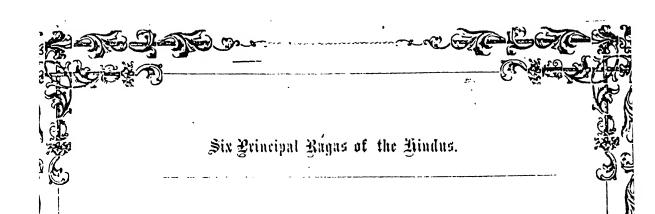
विहारशीलोऽप्यतिनीलदेहो गभीरवादी प्रियकामिनीभिः।
कामातुरः पिङ्गलनेचयुग्मो मल्लाररागो गजवाहनोऽयम्॥



The Meditation of Megha Raga.

This Baga is peppesented as being diessed in blue gayments. Has a grave voice and violet eyes. Rides on an elephant, and is sung in the rainy Season.





(5)

Meghn.

Of the six principal ragas, Megha is the fifth. It is appropriated to the rainy season. This raga belongs to the class, called sharaba, it being generally sung with the omission of a. It has f for its badi or añsa, and both c and d for its sambadi notes; while it begins with the añsa.

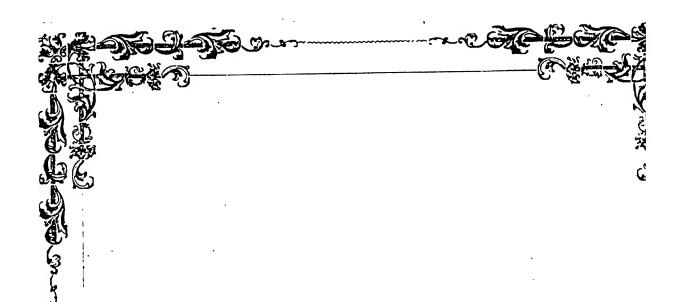
Six Brincipal Zagas of the Hindus.



Lith and print by Kristohury Dose

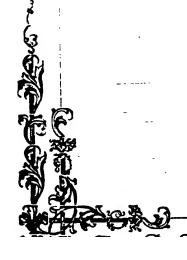
natta náráÿána^{te}

· Culoutta.



नटुनारायणरागस्य ध्यानम्।

तुरङ्गमस्तन्थनिवद्ववाहुः स्वर्णप्रभः शेणितशेणगावः। संग्रामभूमौ विचरन् प्रतापी नटेाऽयमुक्तः किल रङ्गमूर्त्तिः॥



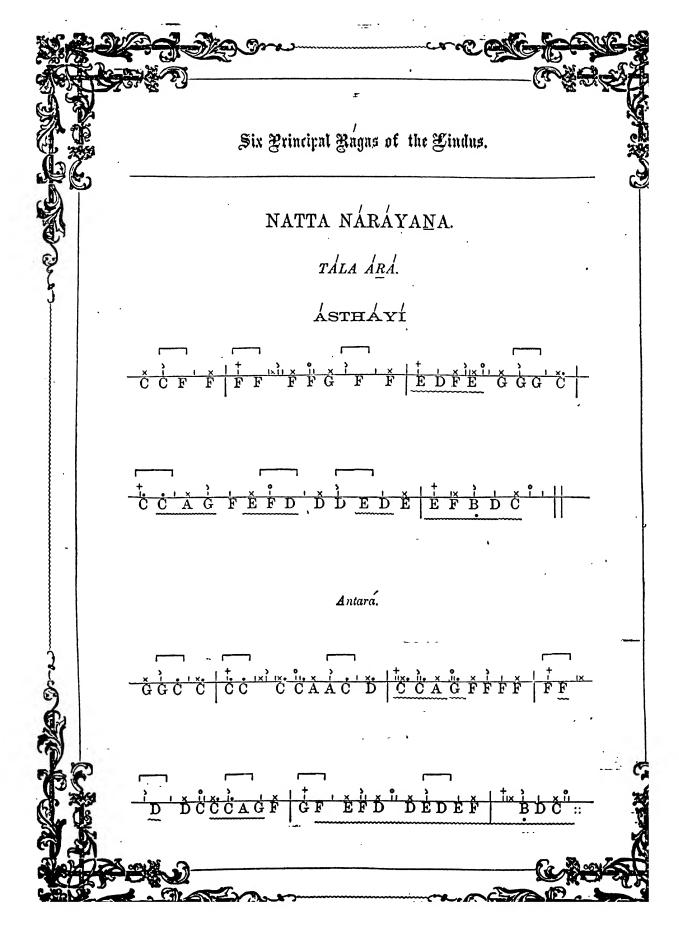


Six Principal Zagus of the Jindus.

The Meditation of Ant-Nannyan Raga.

This Baga is personified as a mighty wantion, niding on konse back in the battle-field and clasping the neek of the animal with one of his agas. Sis body is all besugared with blood.

This Raga is sung in the Wlinten.



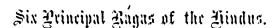
Six Principal Ragas of the Zindus.

(6)

Yattanáráyana.

Nattanáráyana, otherwise called Brihannat, is the last. Its performance is restricted to winter. Songs set to it, are of rare use among us. It is a matter of no small difficulty for the performers to preserve it from being blended with the preceding rága. It has f for its bádt or leading note, and c for its sambádi. It begins and ends with c.



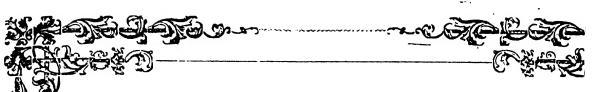


These emblematical representations of the six rágas are expressive of the seasons at which their performance is considered opportune, and of the feelings they are intended to awaken in the mind. These ragas are all marked by a flowing ease on which their beauty hinges. Varied as they are by different sentiments, it would be doubtless interesting to characterize them. In Sri, the prevailing passion is love; mildness and mirth are its principal characteristics. It may also be adapted to the expression of the heroic sentiment. Vasanta is also characterized by love. It is gay and sprightly. The predominant character of Bhairava is gravity. It is grand and contemplative, and is adapted to subjects of a sublime nature. In Panchama, love prevails. It is rich, feminine and delicate. Megha is suited to the expression of love as well as of heroism. It is solemn and grave. Nattanáráyana is characterized by the heroic as well as by sentiment of surprise. It is bold, vigorous and commanding.

It should, in conclusion, be remarked that our rigas and ragins in general are marked by tender feelings. The fact might be accounted for by physical and other adventitious circumstances. Our Arian ancestors of the North dwelling during the Vedic age on the lap of smiling nature, and having little experience of the evils of life, their tender feelings sprang up in their mind with vigor; while the mild influence of their climate favored their growth. Everywhere they felt "the voluptuous calm and the dreamy atmosphere of the lotus-eaters' land. Their social organization at the same time gave them an ample scope for the free exercise of their







Six Principal Bagas of the Hindus.

gentler passions. All gloomy ideas were drowned in the enjoyment of present happiness; the tenor of their soul is mirrored forth in their music." Again the want of foreign influence effectually preserved it from being mixed up with an exotic element; while the absence of any deepstirring revolution within precluded the growth of the stronger passions. It may justly be asserted, therefore, that the Hindus are not very successful in the development of the heroic and other rougher passions—"those hardy children of Western Songs;" but in love and other gentler feelings, they have showed a marked success. Hindu music abounds in feeling and imagination; but for bolder passions, we must look where a colder climate displays a stronger race.



APPENDIX.

SONES EN ENTENPE

वसन्तवाहार। (चृ. ग. ध, नि।) सम्पूर्ण।

ताच मध्यमान।

लितलवद्गलतापरिश्रीलनके।मलमलयसमीरे

मध्करनिकरकरिवतके।किलक्ष् जितकुञ्जकुटीरे।।
विद्यति द्रिरिष्ट् सरसवसन्ते

च्यति युवतिजनेन समं सिख विरिद्धजनस्य दुरन्ते॥
उन्मदमदनमने।रथपिकवधृजनजनितिविलापे

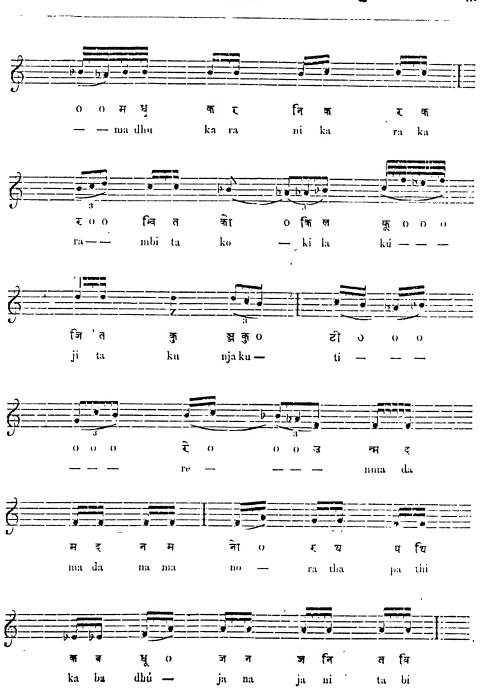
यिलकुलसंकुलकुम्मस्मृष्ठिनराकुलबकुलकलापे॥
स्मानदसीरभरभमवश्मवदनवदलमालतमाले

युवजनद्दयविदारणमनिकनखरुचिकिनुकजाले॥

Rága—Basantabahára. Tála—Madhyamána.







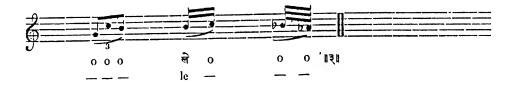


— — yu ba









मदनमहीपतिजनकरखरु चिके प्रस्कुसुमविका थे।

मिलित प्रिली मुख्या टिलियटल छतस्मरतृ खविका से।। ३॥

विग्र लितल ज्ञित जगरवले किनतर खक्र ख्या छत हासे।

विर्देश निष्ठ न्तन कुन्त मुखा छति केतिक दन्त्र रिता थे॥ ५॥

माध्य कापरिमलल लिते न वमा लिक या तिसुगन्धे।।

मुनिमन मामिष मे । इनकारि खितर् क्या कारणवन्धे।॥ ६॥

स्मुर दिमुक्त कतापरिस्थ खमुकु लित पुक्ति तच्चे।।

वन्हा वन विधिने परिसरपरिग्र तयमुना जलपूते।। ७॥

स्री जयदेव भिकातिमर मुर्यति इरिचर खम् तिसारं।

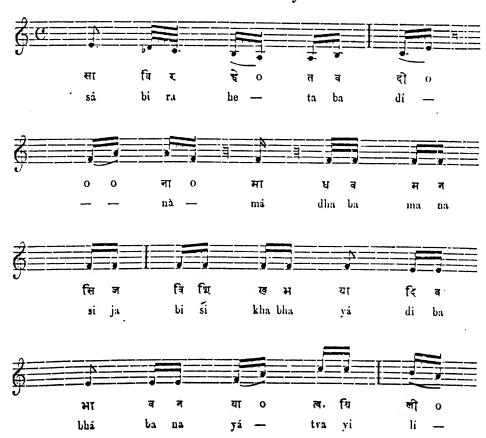
सरसवसक्त समयदन खेरम गुगतमर न विकारं।। ६॥

सोहिनी (ऋ) खाड़व।

ताल मध्यमान।

निन्दित चन्दनिमन्दुिकरणमनुविन्दित खेदमधीरं। ब्यालनिलयमिलनेन गरलिमव कलयित मलयसमीरं॥ सा विरहे तव दीना। माधव मनसिजविशिखभयादिव भावनया त्विय लीना॥१॥

Sohini. Tála-Madhyamána.





सहदयममंथि वमं करेति सजलनिविन्दालं।
सहदयममंथि वमं करेति सजलनिविन्दालं॥२॥
कुसुमविधिखधरतस्यमन्द्यिवासकलाकमनीयं।
त्रतमित्र तत्र परिरम्भसुखाय करोति कुसुमध्यनीयं॥३॥
बहति च बिलतिविलोचनजलधरमामनकमलमुदारं।
विधमित विकटविधन्तदन्तदलनगिलतास्तधारं॥॥॥
विलिखति रहसि कुरक्रमदेन भवन्तमसम्धरभूतं।
प्रथमति मक्रमधा विनिधाय करे च धरं नवचूतं॥५॥
प्रतिपदमिदमिष निगदित माधव तव चर्ये पतिताहं।
त्विय विमुखे मिय सपि सुधानिधिरिप तनुते तनुदाहं॥६॥
ध्यानलयेन पुरःपरिकल्या भवन्तमतीव दुरापं।
विलपति हसति विधीदित रोदिति चच्चित मुच्चित तापं॥०॥
श्रीजयदेवभिखतिमदमिधं यदि मनसा नटनीयं।
हरिवरहाकुलबह्मवयुवितसखीवचनं पठनीयं॥६॥

खाम्बावती (नि) सम्पूर्ण।

ताल प्रलयनिताली।
सञ्चरद्धरमुधामधुरध्वनिमुखरितमे हिनवंशम्।
बिलतहमञ्चलचञ्चलमे जिक्रपोलिक जेले केले केले सम्॥
रासे हरिमिन्न बिन्नितिक जासम्॥
समरित मना मम श्रुतपरिहासम्!।१।

Khámvábatí. Tála Slathatritúli.



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चन्द्रतचारमय्रशिखखक्तमग्रज्ञवलयितकेश्रम्।
प्रचरप्रनन्दरधन्रन्ररिज्ञतमेदुरमृदिरमुवेश्रम्॥२॥
गोपकदम्बन्तितम्बनीमृखचुम्बन्तिस्तिलोभम्॥
बन्धुजीवमध्राधरपद्धवमृद्धसितस्तितशोभम्॥३॥
बिपुलपुलकभुजपद्धववलश्यतबद्धवयुवतिसञ्चम्।
करचरखारिस मिण्णग्रमृष्ठणकिरणविभिन्नतिमस्तम्॥॥॥
जलदपटलवलिन्दुविनिन्दक्षचन्दनितलक्षललाटम्।
पीनपयोधरपरिसरमईनिर्वदेशहृदयक्षवाटम्॥५॥
मिण्णग्रमुन्दन्तिलेशहृदयक्षवाटम्॥५॥
मिण्णग्रमुन्दन्तिलेशहृदयक्षवाटम्॥५॥
मिण्णग्रमुन्दन्तिलेशहृद्धक्षवाटम्॥५॥
मिण्णग्रमुन्दन्तिलेशहृद्धक्षवाटम्॥५॥
मिण्णग्रमुन्दन्तिलेशहृद्धक्षवाटम्॥६॥
भामप्रस्तिन्दन्तिलेशहृद्धक्षवारम्।।।।
स्रिज्ञयदेवभिण्णतमित्रमृन्दरमोह्ननमधुरिपुरूपम्।
हिरचरणस्तरणं प्रति संप्रति पुर्ण्यवतामनुरूपम्॥०॥।

सारङ्ग (ग, ध विबादी) त्रेगड़व।

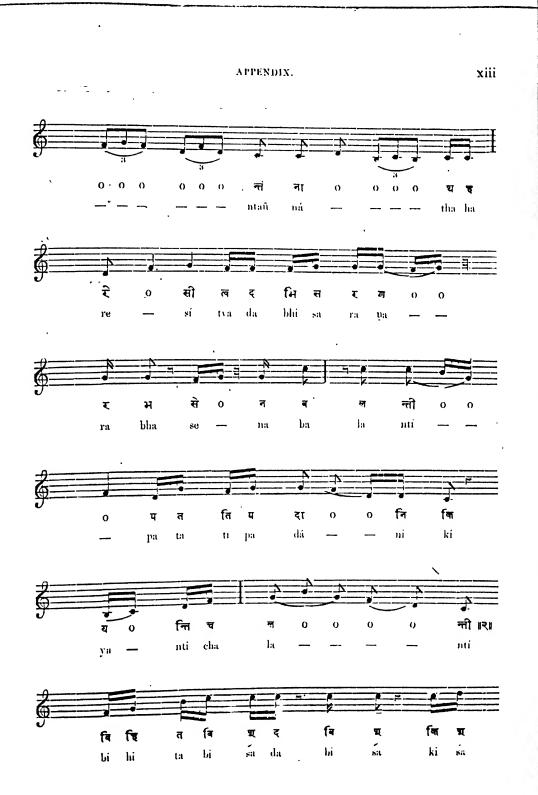
ताल श्लय त्रिताली

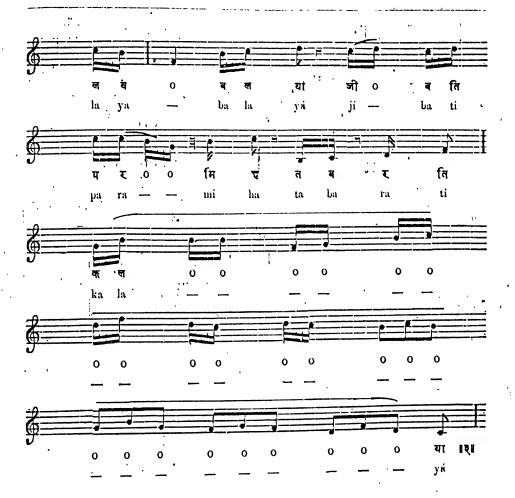
पश्चित दिशि दिशि रहसि भवन्तम्।
तदधरमधुरमधूनि पिवन्तम्।
नाय हरे सीदित राधा बासग्रहे॥१॥
तदभिसरणरभसेन बलन्ती।
पति पदानि कियन्ति चलन्ती॥२॥
विहितबिश्रद्बिश्रिकिश्रलयबलया।
जीवित परिमह तब रितिक्षया॥३॥

Saranga. Tála Slathatritálí.









मुद्धरवलोकितमग्द्दनलीला।
मधुरिपुर्द्धमिति भावनश्रीला॥॥॥
विरितम्पेति न कथमभिसारम्।
द्विरिति वदित सखीमनुवारम्॥५॥
शिल्यंति घुम्नित जलधरकत्यम्।
द्विरिप्रात इति तिसिरमनत्यम्॥६॥
भवति विलम्मिनि विग्नित्तल्या।
विलपति रोदिति वासकस्या॥॥॥
स्रीजयदेवकवेरिस्मृदितम्
रसिक्षननं तनुतामितमुदितम्॥८॥



